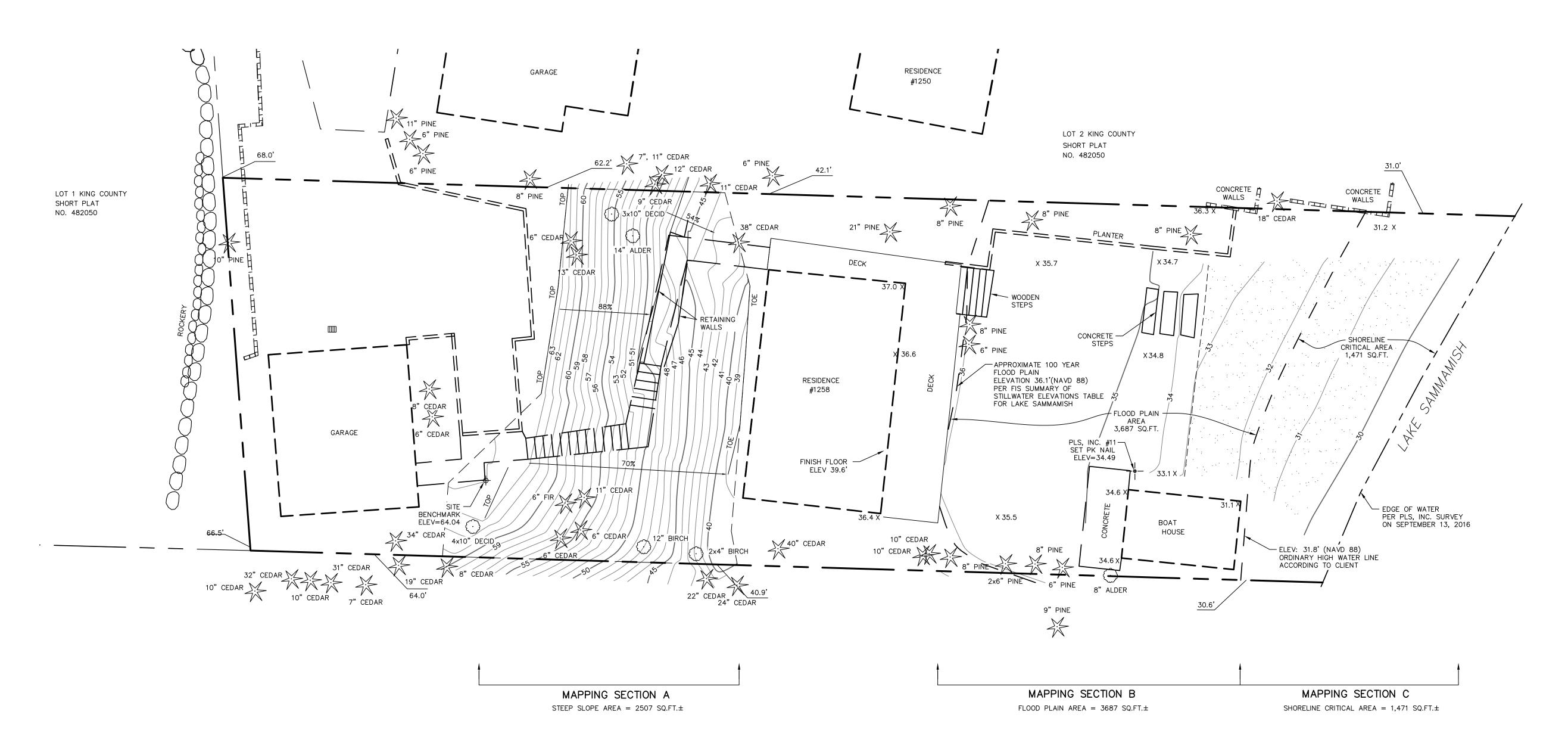
TOPOGRAPHIC SURVEY

SE 1/4 NW 1/4 SEC. 1 TOWNSHIP 24 NORTH, RANGE 5 EAST W.M. KING COUNTY, WASHINGTON



LEGAL DESCRIPTION:

(PER STATUTORY WARRANTY DEED, KING COUNTY RECORDING NO. 20040416002249)

THAT PORTION OF THE NORTH 65 FEET OF THE SOUTH 785 FEET OF GOVERNMENT LOT 2 IN SECTION 1 OF TOWNSHIP 24 NORTH IN RANGE 5 EAST, W.M., LYING EASTERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT THE INTERSECTION OF THE EASTERLY MARGIN OF WEST LAKE SAMMAMISH BOULEVARD SOUTHEAST RIGHT-OF-WAY WITH A LINE DISTANT 720 FEET NORTH OF AND PARALLEL TO THE SOUTH LINE OF SAID GOVERNMENT LOT 2; THENCE SOUTH 89°38'26" EAST, ALONG SAID LINE PARALLEL TO THE SOUTH LINE OF SAID GOVERNMENT LOT 2, A DISTANCE OF 181.21 FEET TO THE TRUE POINT OF BEGINNING OF THIS LINE; THENCE NORTH 5°35'26" WEST A DISTANCE OF 65.35 FEET TO THE NORTH LINE OF SAID SOUTH 785 FEET AND THE TERMINUS OF THIS LINE;

(ALSO KNOWN AS A PORTION OF TRACTS 28 AND 29 OF WEOWNA BEACH TRACTS, LINEFCORDED)

TOGETHER WITH SECOND CLASS SHORE LANDS AS CONVEYED BY THE STATE OF WASHINGTON SITUATE IN FRONT OF, ADJACENT TO OR ABUTTING THEREON;

AND TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS AS DESCRIBED IN INSTRUMENTS RECORDED UNDER KING COUNTY RECORDING NO'S. 3162965, 5841599, 5989270, 6041792, 7112210155, AND 7802011002;

AND TOGETHER WITH AN EASEMENT FOR LANDSCAPING AND ACCESS AS CREATED UNDER KING COUNTY RECORDING NO. 20040416002247.

SITUATE IN THE COUNTY OF BELLEVUE, COUNTY OF KING, STATE OF WASHINGTON.

NOTES AND COMMENTS:

1.) PURPOSE OF SURVEY: THE PURPOSE OF THIS SURVEY WAS TO DEVELOP A 1-FOOT CONTOUR INTERVAL TOPOGRAPHIC MAP OF THE SUBJECT PROPERTY FOR USE AS A PLANNING AND DESIGN BASE BY OTHERS.

2.) HORIZONTAL DATUM: THE OVERALL HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83/2011, WASHINGTON COORDINATE SYSTEM, NORTH ZONE, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

3.) VERTICAL DATUM: THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

4.) FIELD SURVEY METHODOLOGY: FIELD MEASUREMENTS FOR THIS SURVEY WERE PERFORMED USING A 5-SECOND OR BETTER ELECTRONIC TOTAL STATION.

5.) INSTRUMENT CALIBRATION: ALL MEASURING INSTRUMENTS EMPLOYED IN THIS SURVEY HAVE BEEN MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

6.) THE PLS, INC. PORTION OF THIS MAP GRAPHICALLY REPRESENTS CONDITIONS AND FEATURES EXISTING AT THE TIME OF THIS SURVEY ONLY, WHICH WAS PERFORMED DURING FEBRUARY 2, 2016 AND SEPTEMBER 13 OF 2016.

7.) THIS SURVEY WAS PREPARED FOR THE <u>EXCLUSIVE</u> USE OF THE CLIENT NAMED HEREON. ITS' USE DOES NOT EXTEND TO ANY UNNAMED PERSON OR PERSONS WITHOUT THE EXPRESS RECERTIFICATION BY THIS SURVEYOR NAMING SUCH PARTY.

8.) FOR YOUR INFORMATION: 0.0833 FEET = 1 INCH ON THE GROUND

9.) KING COUNTY TAX PARCEL NUMBER: 9253900150

10.) THE PROPERTY AND PUBLIC RIGHT-OF-WAY LINES SHOWN HEREON WERE PROVIDED BY TYEE SURVEYORS.

11.) AREA OF PARCEL: 13,381 ± SQ. FT. (0.31 ACRES) BASED ON SEPTEMBER 2016 SHORELINE.

12.) FOR CLARITY PURPOSES WE HAVE USED GRAPHIC SYMBOLS TO REPRESENT SOME FEATURES ON THIS MAP, SUCH AS UTILITIES, TREES AND FENCES. THE DEFAULT SIZE OF THOSE SYMBOLS MAY NOT REFLECT THE TRUE SIZE OF THE FEATURE THAT WAS MAPPED.

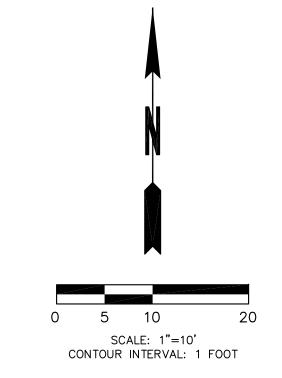
SITE MAPPING NOTE:

AND THE PARCEL BOUNDARY.

THIS TOPOGRAPHIC MAP IS A COMPOSITE OF MAPPING BY PLS, INC. (2016) AND TYEE SURVEYORS (2014). THE ELEMENTS CONTRIBUTED BY EACH SURVEY FIRM ARE AS FOLLOWS:

PLS, INC.: ALL TREES, SURFACE FEATURES AND CONTOURS IN SECTION A SECTION B, AND SECTION C, AND 100 YEAR FLOOD PLAIN LINE.

TYEE SURVEYORS: ALL OTHER SURFACE FEATURES, STRUCTURE FOOTPRINTS



LEGEND:

SITE BENCH MARK

SET PK NAIL

TREE (CONIFEROUS) WITH TRUNK DIAMETER NOTED

TREE (DECIDUOUS) WITH TRUNK DIAMETER NOTED

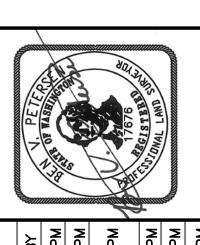
GRAVEL SURFACE

CATCH BASIN

X 00.0 TYEE SPOT ELEVATION

| PLS, Inc. | Inc. | PLS, Inc. | Inc. | Professional Land Surve | 1595 NW Gilman Boulevard, #14 | Issaquah, Washington 98027 (425) 313-9378 (fax) 313-937

PO BOX 7415 3FLLEVUE WA 98008



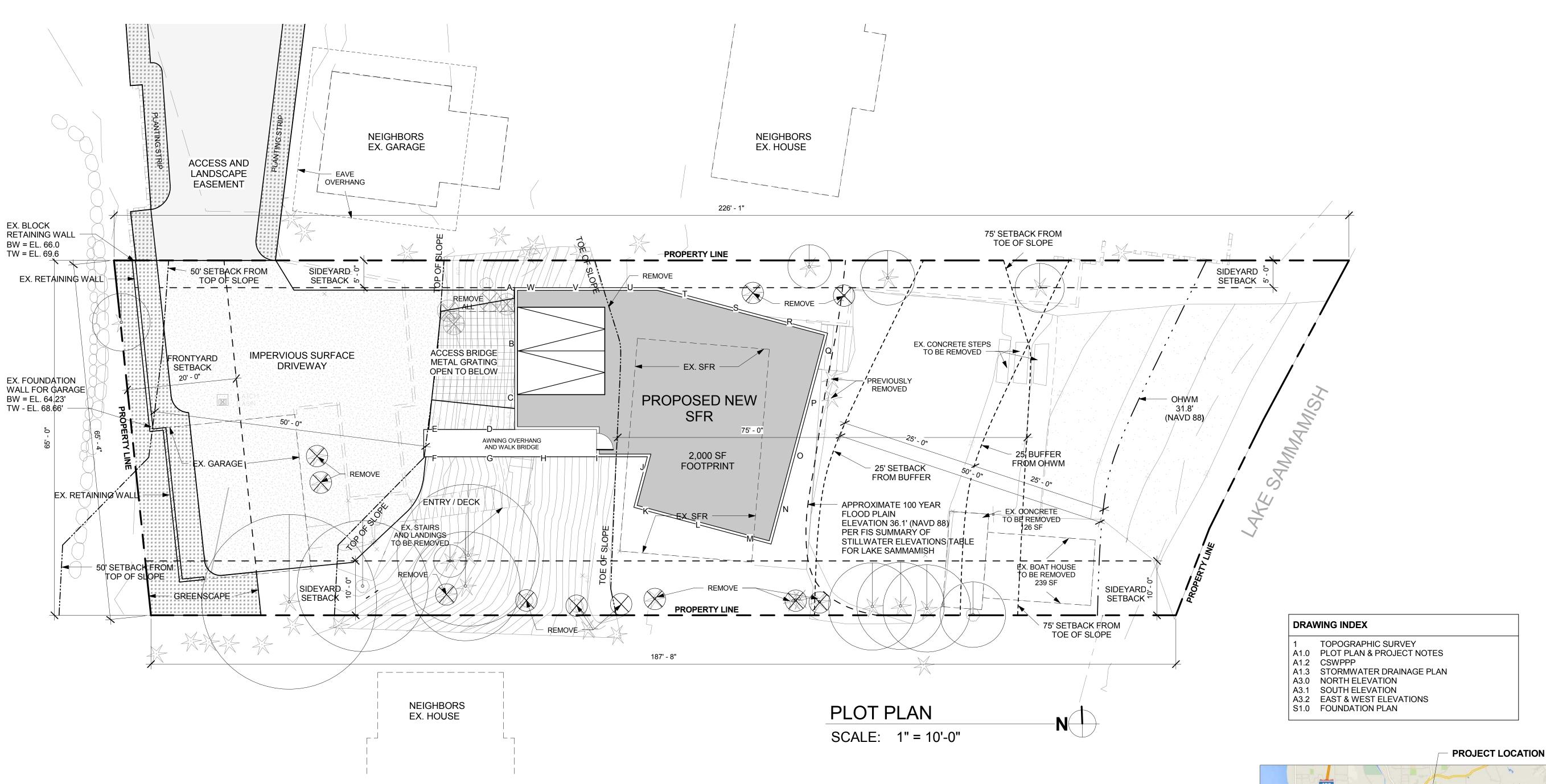
OCT 20, 201

l of 1

16012 TOPO.DWG

JOB NO:

DRAWING NAME:



50' - 0"

50' FROM OHWM

245 - 1258 LAKE SAMM SFR

LOT COVERAGE FAR - FLOOR AREA RATIO IMPERVIOUS SURFACES 1258 WEST LAKE SAMMAMISH PKWY SE SPOT ELEVATIONS FOR HEIGHT CALCULATIONS: BELLEVUE, WA 98008 A = 48.83N = 36.75LOT AREA 13,381 SF **PROJECT #** 16-132103-DC 1ST FLOOR = 1,791 SF LOT AREA 13,381 SF O = 36.92B = 51.33LOT AREA x .5 = 6,691 SF2ND FLOOR = 1,791 SF **ZONE**: R 3.5 C = 51.08P = 36.58**LOT SIZE:** 13,381SF 3RD FLOOR (INC. GARAGE) = 1,791 SF **PROTECTED AREA** D = 53.67Q = 36.25USE TYPE: RESIDENTIAL (SINGLE FAMILY) ROOF LEVEL = 583 SF 2,507 SF STEEP SLOPE E = 64.00R = 36.923,687 SF 100 YEAR FLOOD PLAIN **NEW AND REMAINING** F = 61.92S = 37.75PROJECT DESCRIPTION: NEW CONSTRUCTION, SINGLE FAMILY TOTAL= 5,956 SF 1,471 SF SHORELINE IMPERVIOUS SURFACES T = 38.00G = 54.42RESIDENCE LOT COVERAGE 5,716 SF H = 47.75U = 40.92LOT AREA $x.5 = (13,381 \times .5 = 6,691 \text{ SF})$ = 2,000 SFI = 41.58V = 43.92**TAX ID NUMBER:** 925390-0150 ALLOWABLE $5,716 \times .35 = 2,001 \text{ SF}$ DRIVEWAY = 2,387 SF J = 40.42W = 48.00PROPOSED 5,956 SF < ALLOWED 6,691 SF K = 39.25TOTAL NEW & REPLACED IMPERVIOUS SURFACE: 4,152 SF PROPOSED 4,387 SF < ALLOWED 6,691 SF L = 37.67PROPOSED SFR 2,000 SF M = 37.25**LEGAL DESCRIPTION:** WEONA BEACH UNREC POR OF S 5 FT **REQUIRED SET BACKS:** PER LUC 20.20.010 PROPOSED 1,995 SF < ALLOWED 2,001 SF REQUIRED GREENSCAPE: PER LUC 20.20.010 OF TR 28 & TR 29 LY ELY OF A LN BAAP ON S LN TR 29 181.21 FT E TOTAL = 888.33/23 = 44.4" 44' - 4" AVE. GRADE OF ELY MGN CO RD TH N 05-35-26 W 65.35 FT TO N LN SD S 5 FT **FRONT** 20'-0" (MIN) TR 28 & TERMINUS SD LN & SH LDS ADJ FRONT YARD GREENSCAPE MAX ALLOWABLE (FLAT ROOF) = 74' - 4" SIDE 5'-0" (MIN) 5'- 0" TOTAL AREA = 1,309 SF - 50% REQUIRED = 654.50 SF MAX ALLOWABLE (SLOPE ROOF) = 79' - 4" 5'-0" (MIN) 10'- 0" GREENSCAPE PROVIDED = 656 SF PROPOSED (SLOPE ROOF) = 78' -2" SIDE TOTAL 15'-0" 15'- 0" SHORELINE 25'-0" FROM 25' BUFFER / PROVIDED - 656 SF> REQUIRED - 654.50 SF MAX FACADE HEIGHT - 40' - 0" FROM EX. GRADE

Hill-Novelty Hill Redmond ints Point Clyde Hill Sammamish Bellevue Sammamish Pkwy SE Klahanie lercer Island

> **VICINITY MAP** SCALE: N.T.S.

APPLICATION

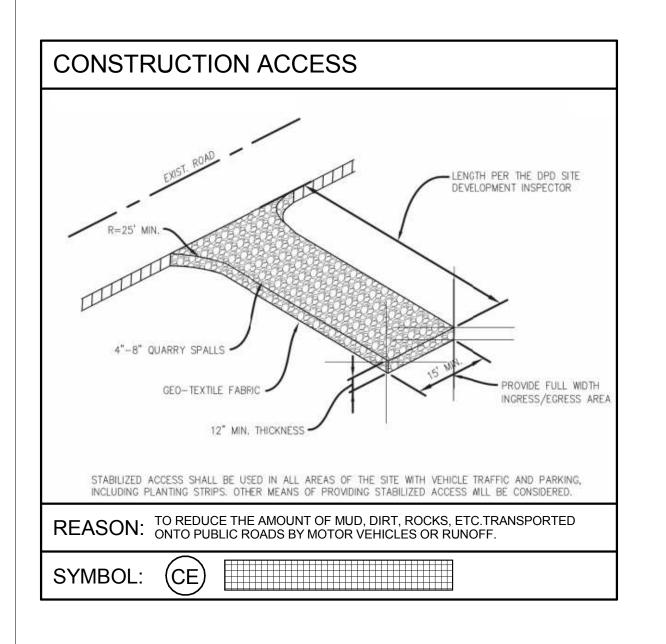
1/18/2019

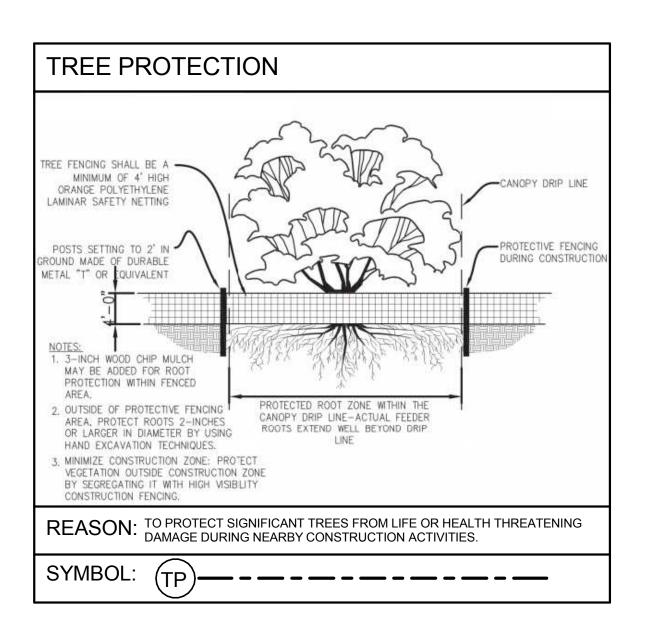
SAMMAMISH | 4 98008

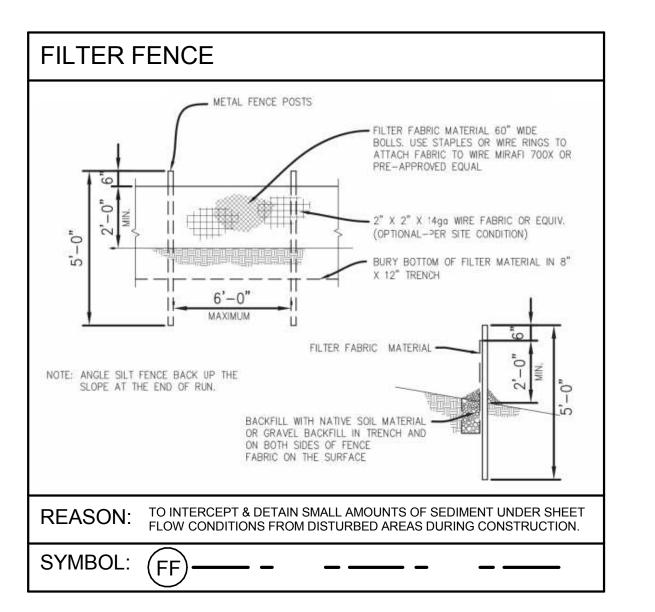
1258 W LAKE S BELLEVUE, WA

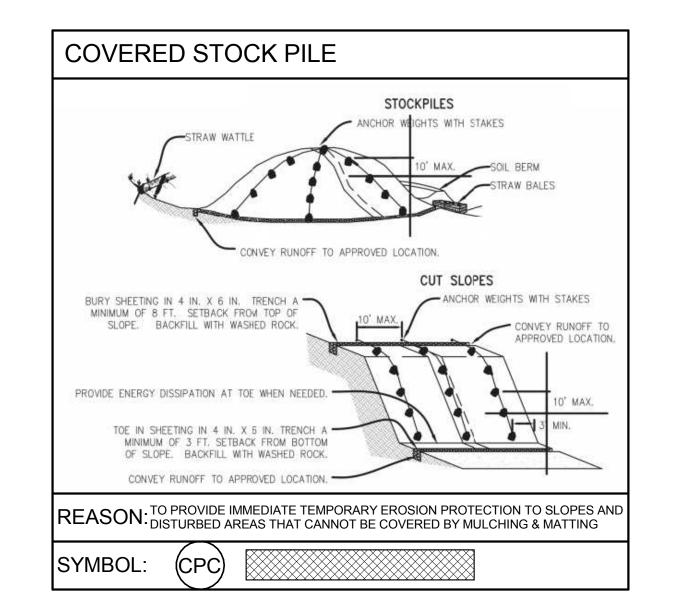
SFR

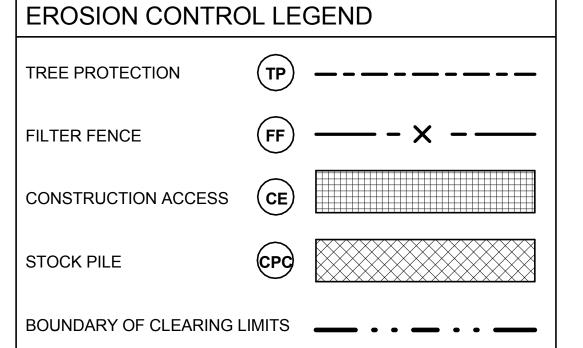
PLOT PLAN & PROJECT NOTES





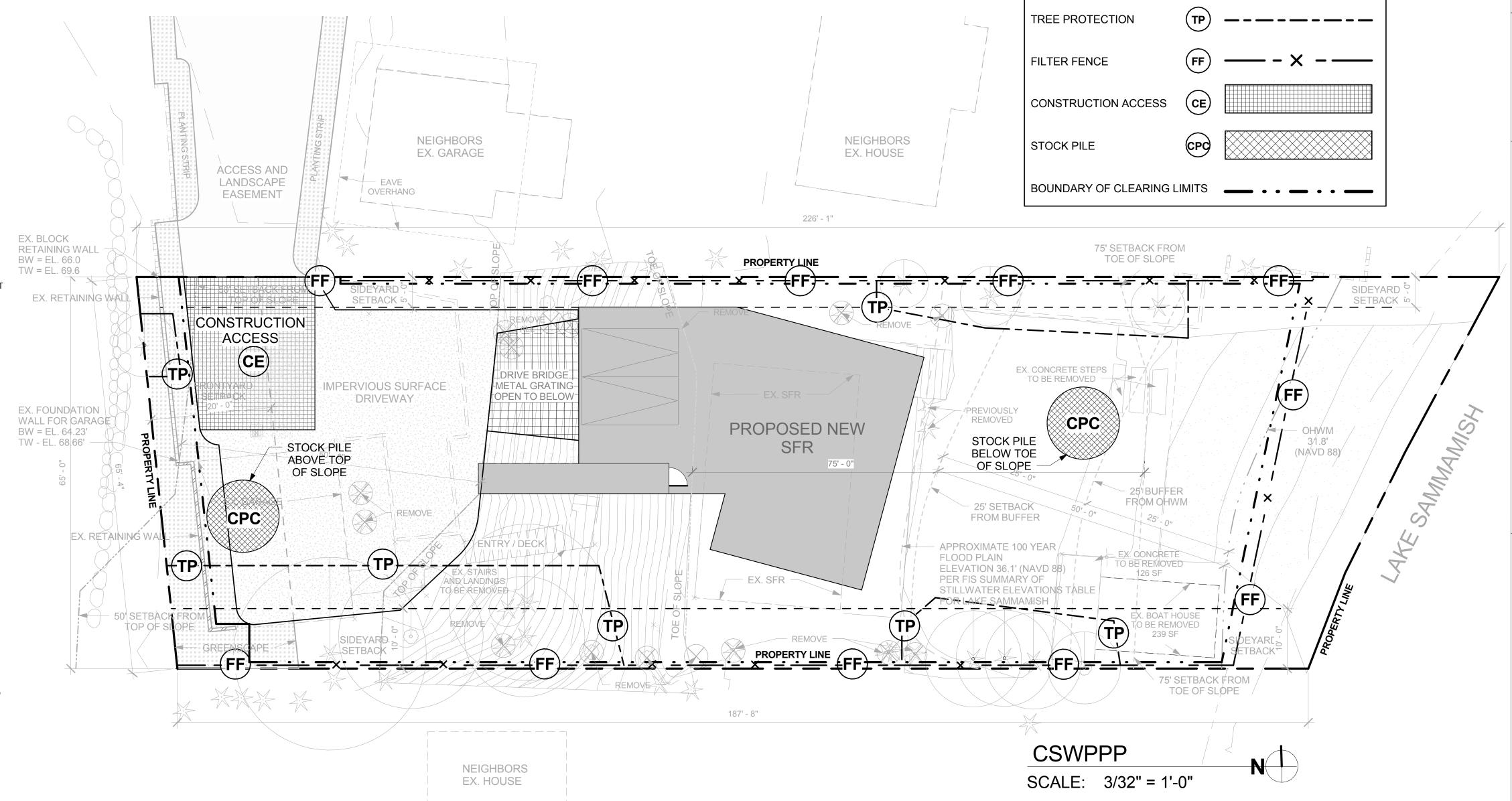






EROSION CONTROL PLAN NOTES

- ALL CLEARING AND GRADING CONSTRUCTION MUST BE IN ACCORDANCE WITH CITY OF BELLEVUE (COB) CLEARING AND GRADING CODE, CLEARING AND GRADING DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND STANDARDS. THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THESE REQUIREMENTS. ANY VARIANCE FROM ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF BELLEVUE DEVELOPMENT SERVICES (DSD) PRIOR TO CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT AND THE PROFESSIONAL ENGINEER TO CORRECT ANY ERROR, OMISSION, OR VARIATION FROM THE **ABOVE** REQUIREMENTS FOUND IN THESE PLANS. ALL CORRECTIONS SHALL BE AT NO ADDITIONAL COST OR LIABILITY TO THE COB.
- APPROVAL OF THIS EROSION/SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- A COPY OF THE APPROVED PLANS AND DRAWINGS MUST BE ON-SITE DURING CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRES OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- THE FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER TO NOT LEAVE THE SITE.
- ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION, DURING THE CONSTRUCTION PERIOD. NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- CLEARING SHALL BE LIMITED TO THE AREAS WITHIN THE APPROVED DISTURBANCE LIMITS. EXPOSED SOILS MUST BE COVERED AT THE END OF EACH WORKING DAY WHEN WORKING FROM OCTOBER 1ST THROUGH APRIL 30TH. FROM MAY 1ST THROUGH SEPTEMBER 30TH, EXPOSED SOILS MUST BE COVERED AT THE END OF EACH CONSTRUCTION WEEK AND ALSO AT THE THREAT OF RAIN.
- AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT.
- THE CONTRACTOR MUST MAINTAIN A SWEEPER ON SITE DURING EARTHWORK AND IMMEDIATELY REMOVE SOIL THAT HAS BEEN TRACKED ONTO PAVED AREAS AS A RESULT OF CONSTRUCTION.
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- ANY EXCAVATED MATERIAL REMOVED FROM THE CONSTRUCTION SITE AND DEPOSITED ON PROPERTY WITHIN CITY LIMITS MUST BE DONE IN COMPLIANCE WITH A VALID CLEARING AND GRADING PERMIT. LOCATIONS FOR THE MOBILIAZATION AREA AND STOCKPILED MATERIAL MUST BE APPROVED BY THE CLEARING AND GRADING INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF ANY STOCKPILING.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTIANED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A MAJOR STORM EVENT.
- FINAL SITE GRADING MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM OF 5% SLOPE, PER THE INTERNATIONAL RESIDENTIAL CODE (IRC) R401.3.



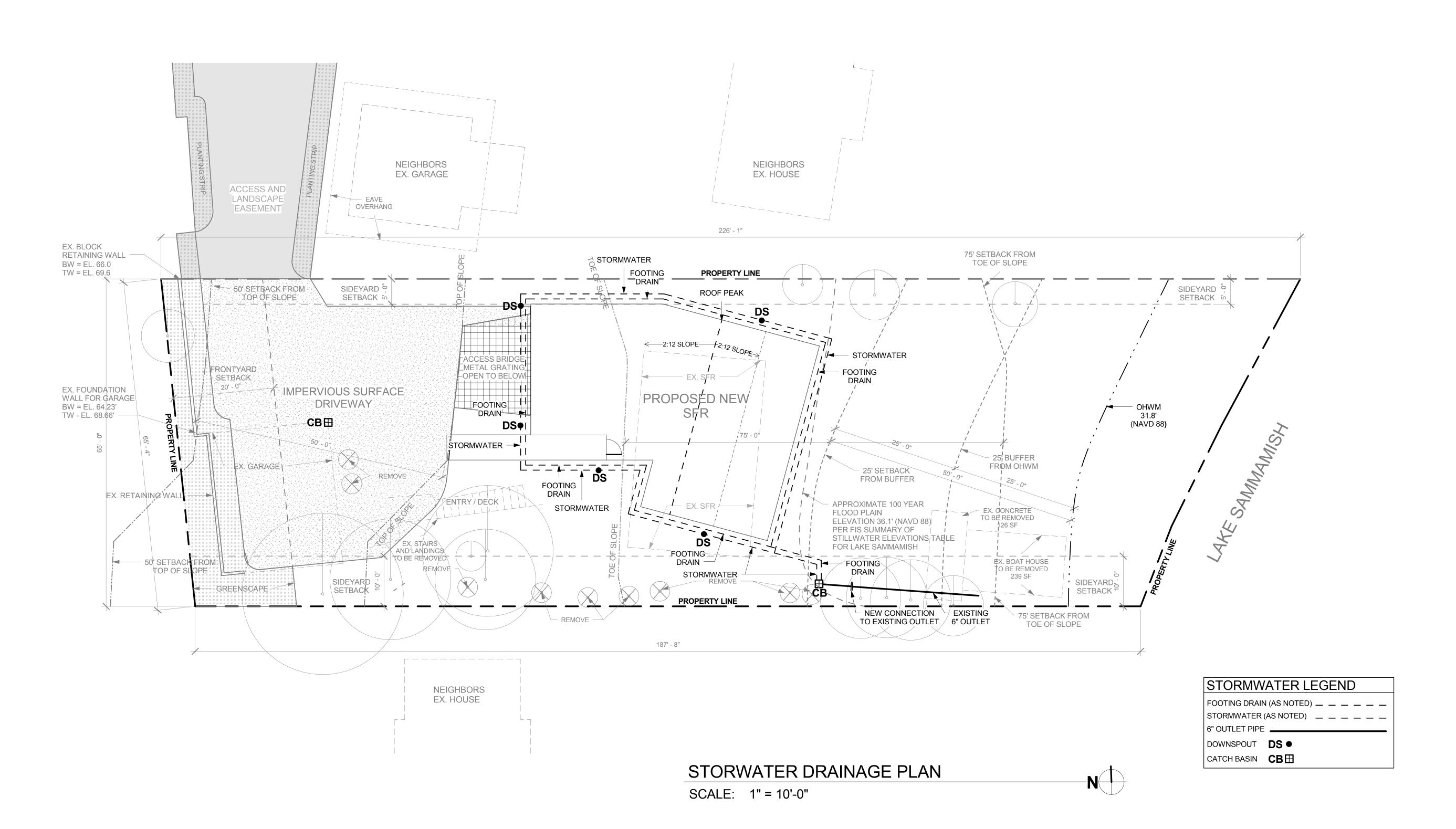
CSWPPP

SAMA 9800

1258 BELLE

APPLICATION

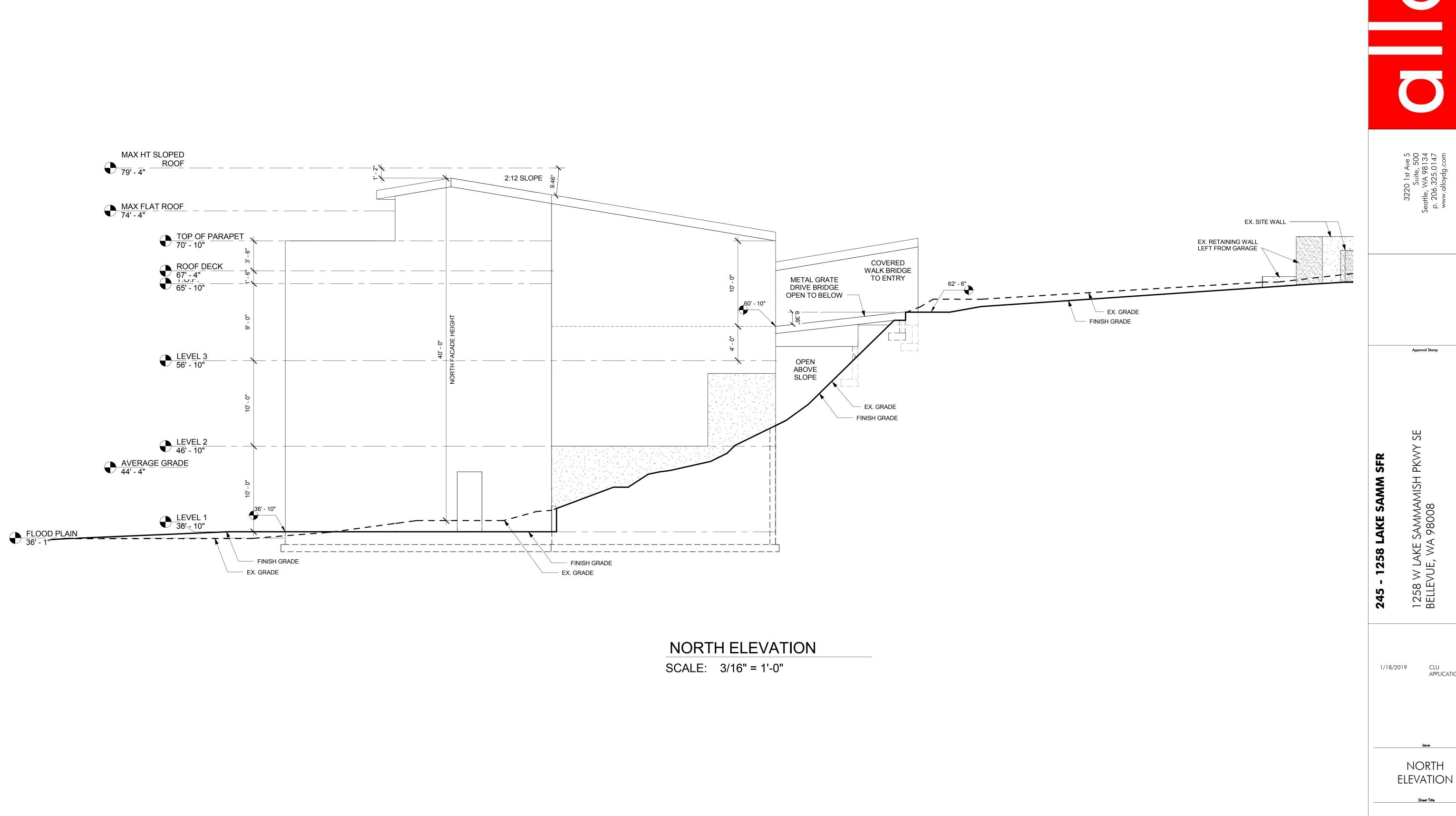
1/18/2019



1258 W LAKE SAMMAMISH BELLEVUE, WA 98008

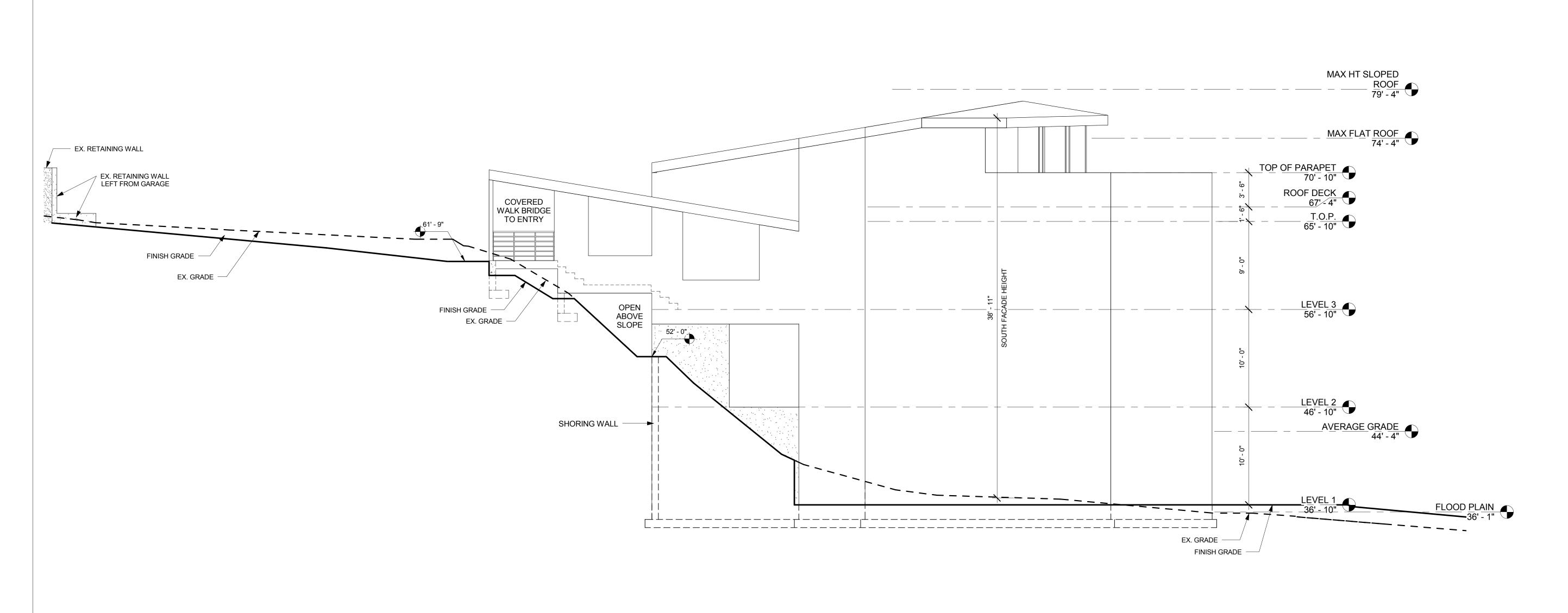
1/18/2019 CLU APPLICATION

STORMWATER DRAINAGE PLAN



CLU APPLICATION

NORTH



SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

3220 1st Ave S Suite, 500 Seattle, WA 98134 p. 206.325.0147 www.alloydg.com

Approval Stamp

1258 W LAKE SAMMAMISH PKWY SE BELLEVUE, WA 98008

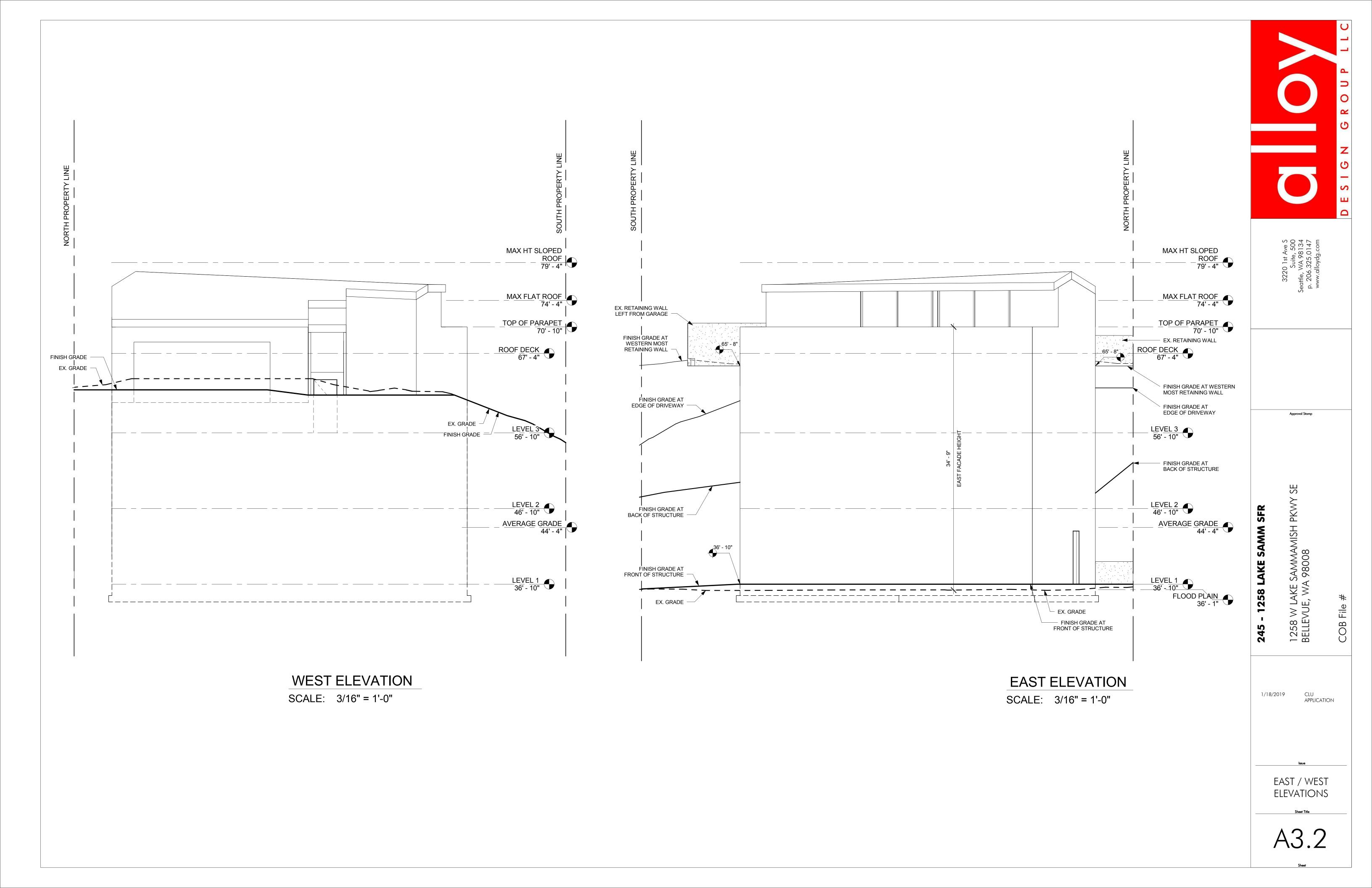
1258 BELLE

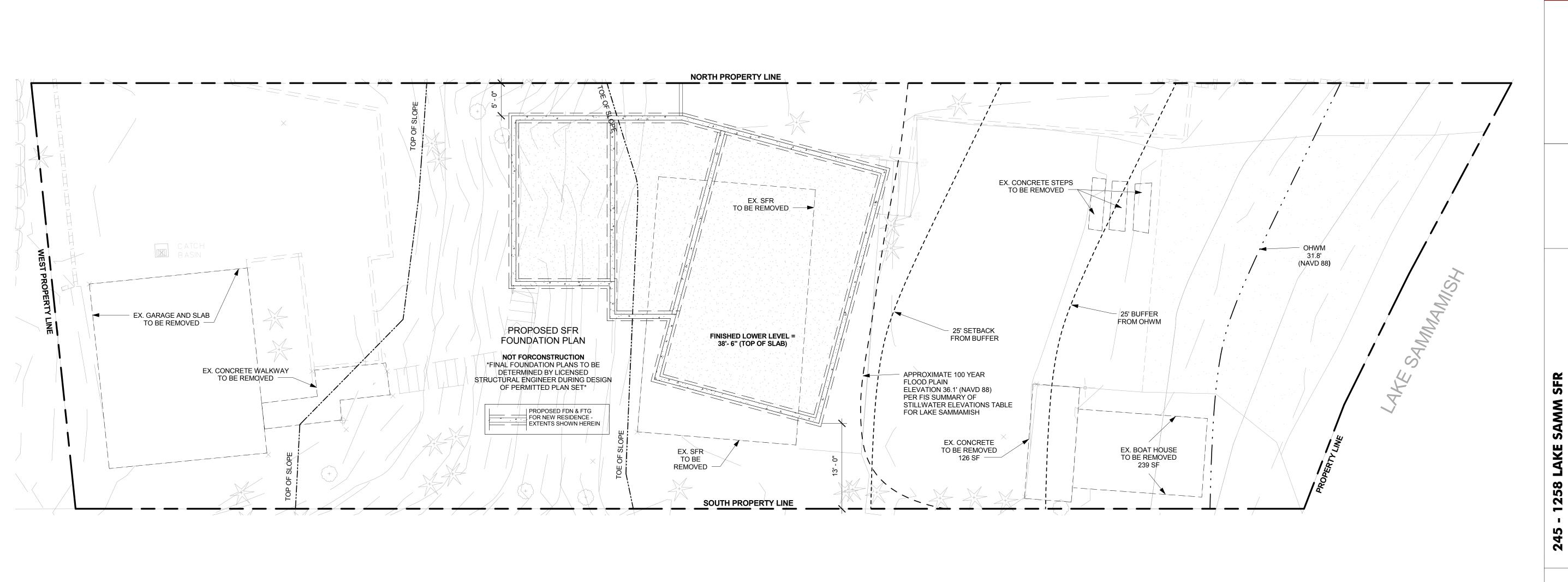
1/18/2019 CLU APPLICATION

Issue

SOUTH ELEVATION

A3.1





FOUNDATION PLAN

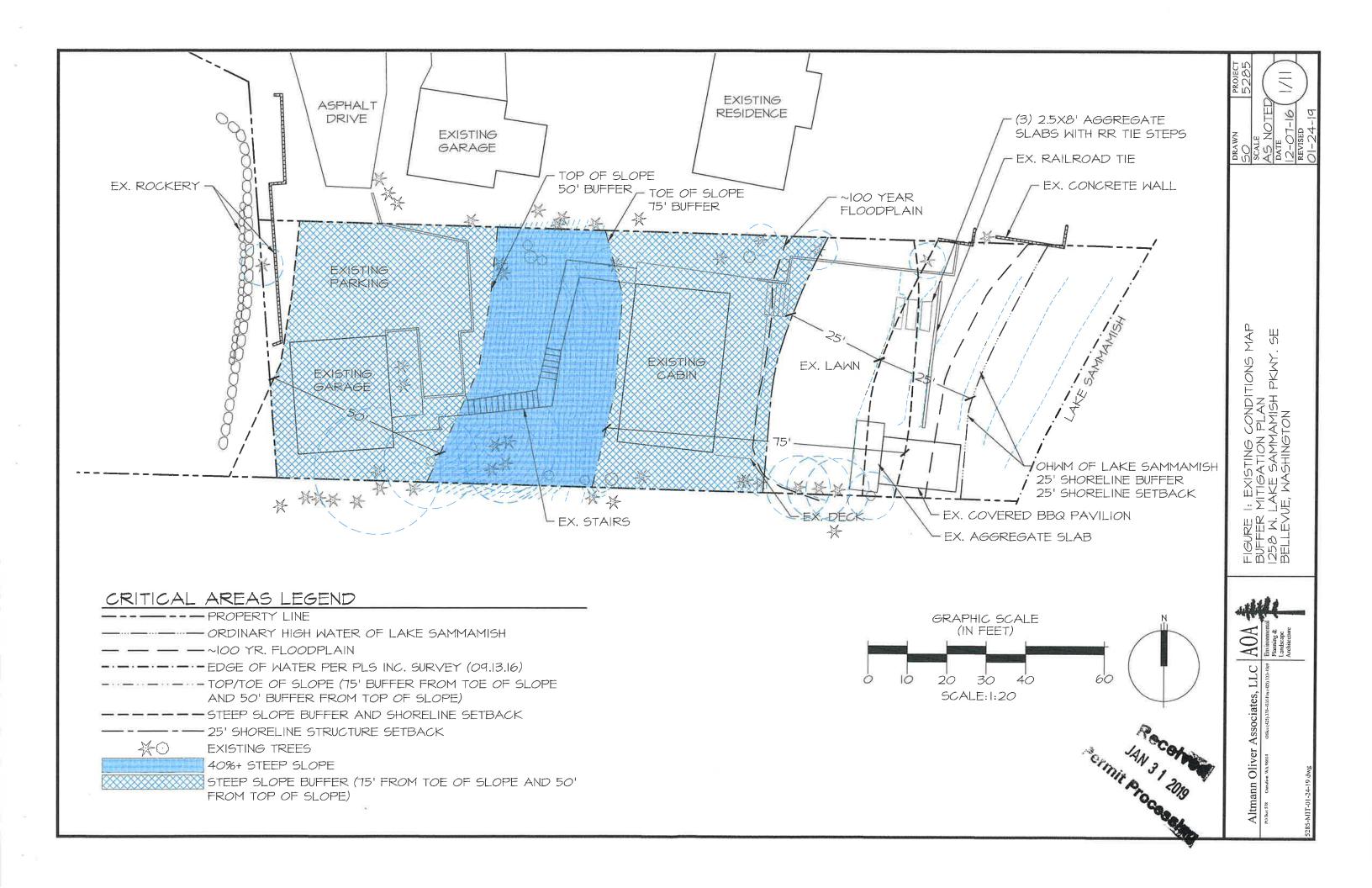
SCALE: 1/8" = 1'-0"

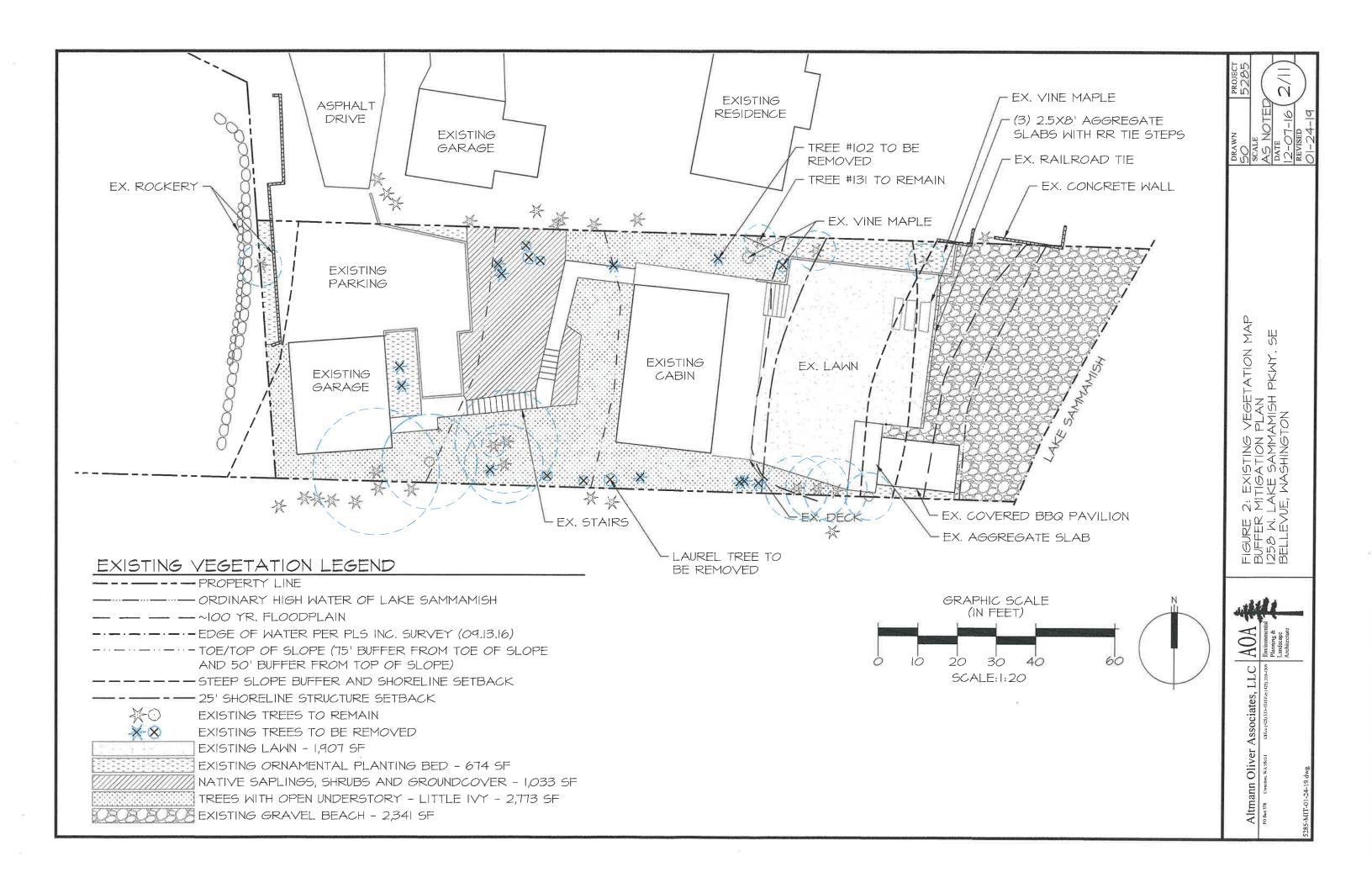
SE 1258 W LAKE SAMMAMISH BELLEVUE, WA 98008

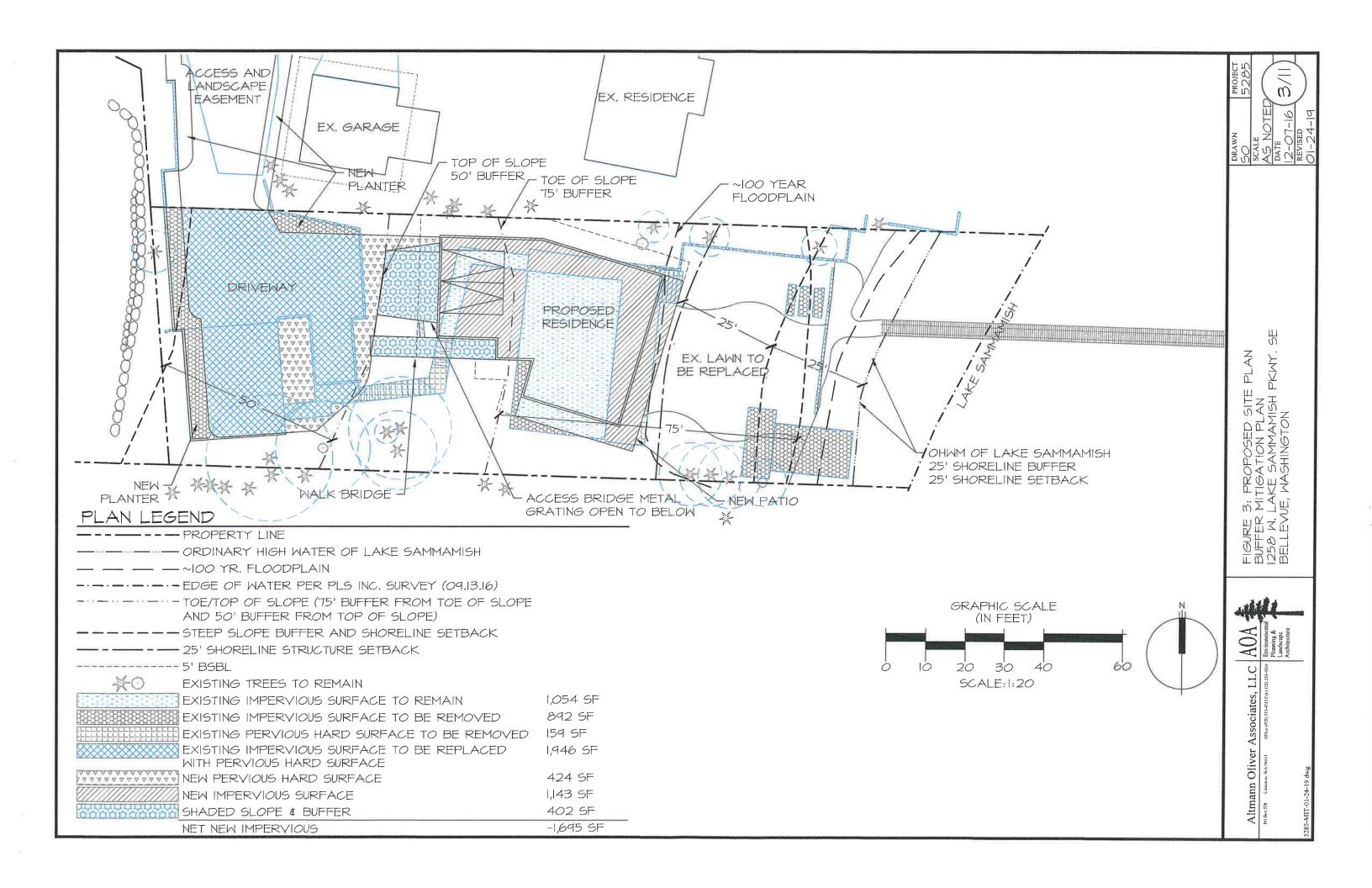
SFR

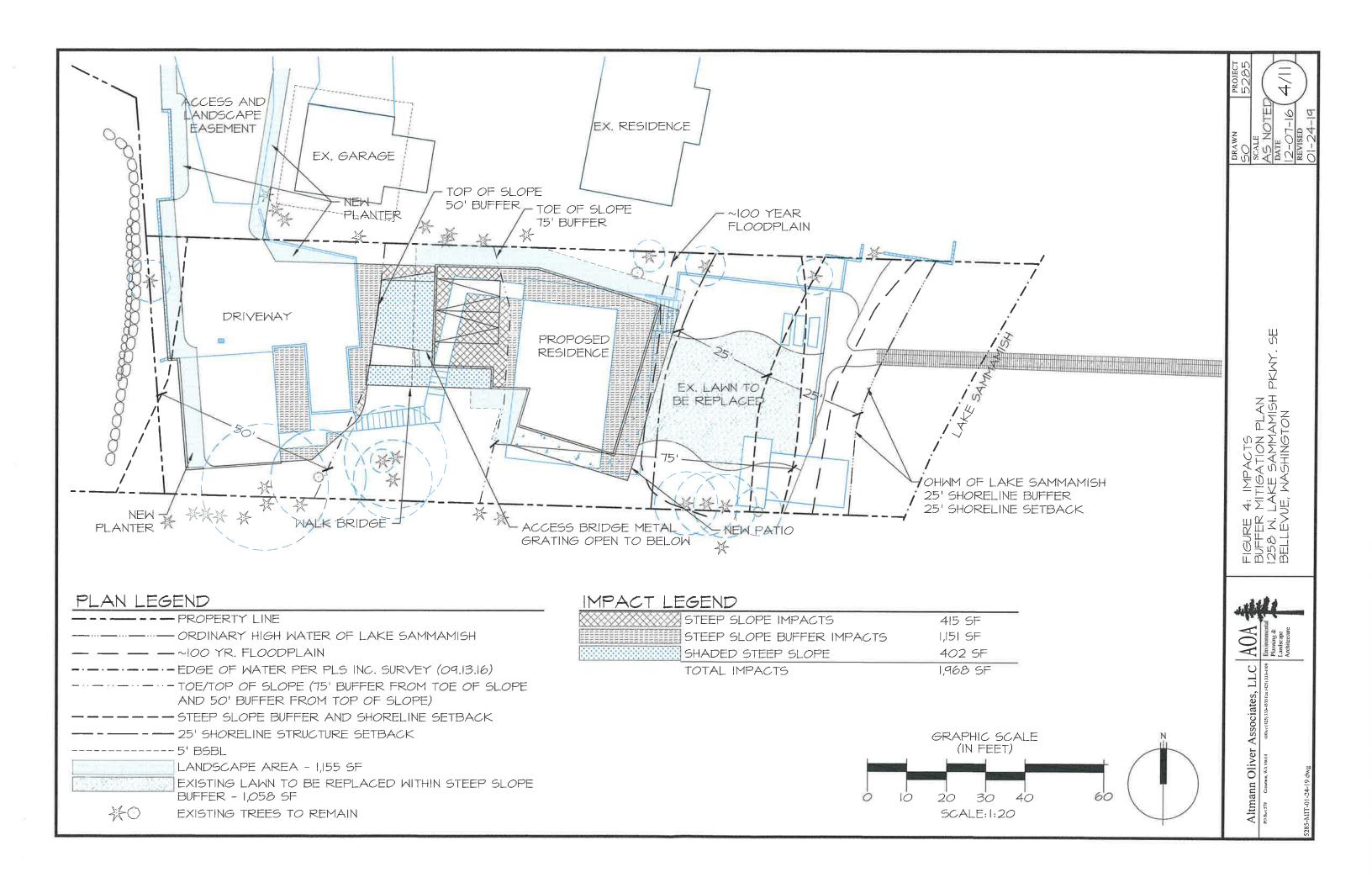
1/18/2019 CLU APPLICATION

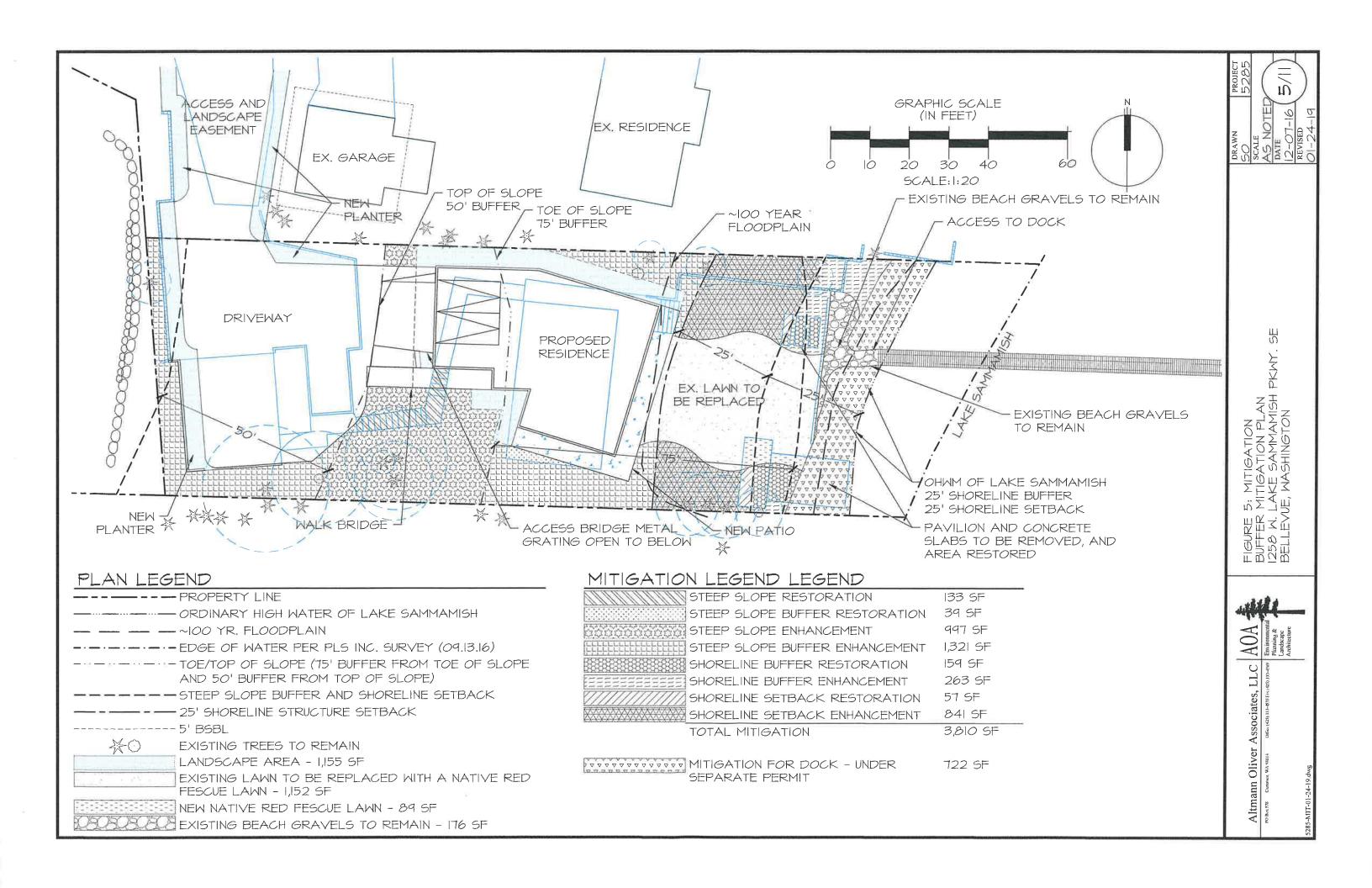
FOUNDATION PLAN

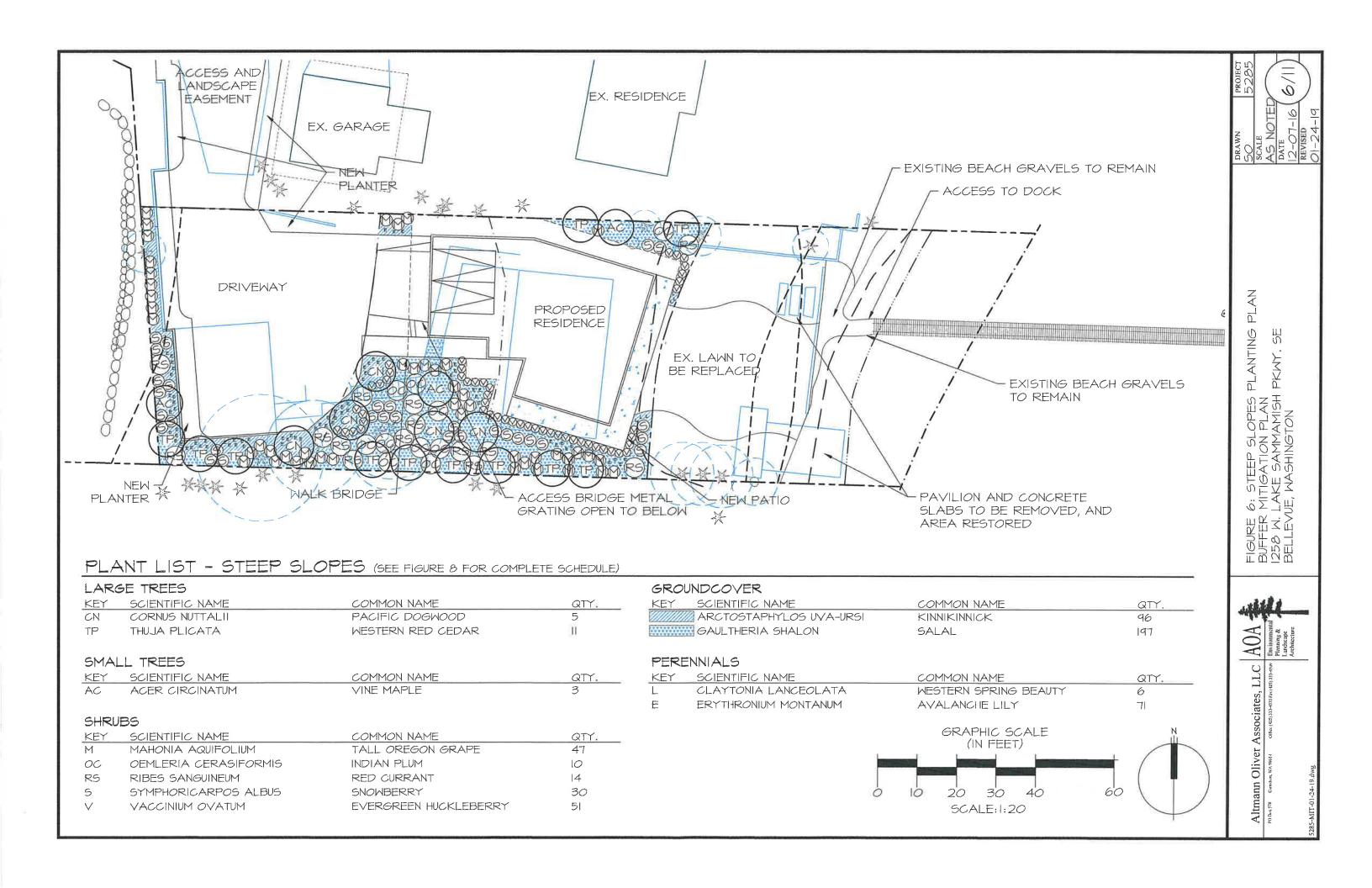






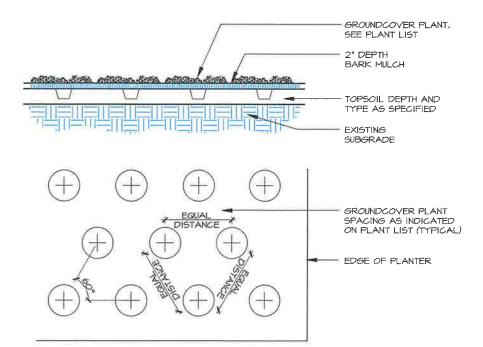




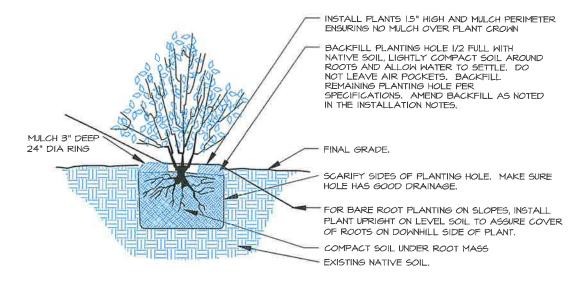


CONTAINER TREE/SHRUB PLANTING (TYP.)

ROOT BALL DIAMETER



GROUNDCOVER PLANTING (TYP.)



BARE-ROOT SHRUB PLANTING (TYP.)

<u>М</u> PKMY. E 9: PLANTING DETAILS FR MITIGATION PLAN A. LAKE SAMMAMISH PK EVUE, WASHINGTON

0

 $\frac{Q}{}$

AOA

Environmenta
Plunning &
Landscape
Architecture

Altmann Oliver Associates, LLC

FIGURE 9 BUFFER 1 1258 M. L BELLEVU

CONSTRUCTION MANAGEMENT

- 1. Prior to commencement of any work in the steep slope and shoreline setback enhancement areas, the clearing limits will be staked and all existing vegetation to be saved will be clearly marked. A pre-installation meeting will be held at the site to review and discuss all aspects of the project with the owner.
- 2. A biologist will supervise plan implementation during construction to ensure that objectives and specifications of the steep slope and shoreline setback enhancement plan are met.
- 3. Any necessary significant modifications to the design that occur as a result of unforeseen site conditions will be jointly approved by the City of Bellevue and the biologist prior to their implementation.

MONITORING METHODOLOGY

- 1. The monitoring program will be conducted twice yearly (in the beginning and end of the growing season) for a period of five years, with reports submitted annually (at the end of the growing season) to the City of Bellevue.
- 2. Vegetation establishment within the steep slope and shoreline setback enhancement areas will be monitored during each field visit with a record kept of all plant species found.
- 3. Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the enhancement areas. Review of the photos over time will provide a semi-quantitative representation of success of the enhancement plan.

PERFORMANCE STANDARDS

Success of plant establishment within the steep slope and shoreline setback enhancement areas will be evaluated on the basis of percent survival of planted species.

- 1. Native woody cover will be a minimum of; 10% at construction completion, 15% at year 1, 20% at year 2, 25% at year 3 and 40% at year 5.
- 2. There will be 100% survival of all woody planted species throughout the mitigation planted area at the end of the first year of planting. For years 2-5, success will be based on an 85% survival rate or similar number of recolonized native woody plants.
- 3. Exotic and invasive plant species will be maintained at levels below 10% total cover. Removal of these species will occur immediately following the monitoring event in which they surpass the above maximum coverage. Removal will occur by hand whenever possible.

MAINTENANCE (M) & CONTINGENCY (C)

- 1. Established performance standards for the project will be compared to the monitoring results in order to judge the success of the enhancement project.
- 2. Contingency will include many of the items listed below and would be implemented if these performance standards are not met.
- 3. Maintenance and remedial action on the site will be implemented immediately upon completion of the monitoring event, (unless otherwise specifically indicated below).
- replace dead plants with the same species or a substitute species that meet the goal of the enhancement plan (C)
- re-plant areas after reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.) (C)
- irrigate following plant installation for five years (M)

PERFORMANCE BOND

- I. A performance bond or other surety device will be posted with the City of Bellevue by the applicant to cover the costs of steep slope and shoreline setback enhancement plan implementation (including labor, materials, maintenance, and monitoring).
- 2. The bond or assignment may be released in partial amounts in proportion to work successfully completed over the five year monitoring period, as the applicant demonstrates performance and corrective measures.

FIGURE 5: MAINTENANCE & MONITORING PLAN DOCK MITIGATION PLAN 1258 M. LAKE SAMMAMISH PKMY. SE BELLEVUE, MASHINGTON

TU,

AOA Environmental Plansing & Landscape Architecture

Altmann Oliver Associates, LLC POBLES COMMINGTON CONFIGURATION CONFIGURA

PO Box 578 Camation, W.A 98014 Office (

Altmann Oliver Associates, LLC

AOA :

PO Box 578

Carnation, WA 98014

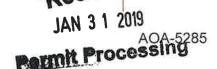
Office (425) 339-4535

Fax (425) 333-4509

Environmental Planning & Landscape Architecture

January 25, 2019

Brian Heberling Lago Mar LLC PO Box 7415 Bellevue, WA 98008



SUBJECT:

Critical Areas Report - Habitat Assessment - Weowna Point

1258 W. Lake Sammamish Pkwy SE, Bellevue, WA

Steep Slope and Shoreline Buffer Modification and Enhancement

Dear Brian:

On October 3, 2016 I conducted an initial wetland and stream reconnaissance and habitat assessment on the subject property located along the shoreline of the west side of Lake Sammamish. The primary purpose of the site visit was to assess proposed modifications to the steep slope, steep slope buffer, and shoreline habitat functions as part of a proposed re-development of the property to replace an existing residence with a new single-family residence. See the geotechnical report by Geotechnical Consultants, Inc. for information pertaining to slope stability and geotechnical performance standards.

No wetlands or streams were identified on the site utilizing the methodology outlined in the May 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).

1.0 EXISTING CONDITIONS

The central portion of the site is developed with a small single-family residence. Maintained lawn extended east from the residence to the edge of a gravel beach located along the shoreline. An existing covered pavilion is located in the southeast corner of the property.

A steep slope is located immediately west of the residence. An existing garage and parking area are located at the top of the slope in the far western portion of the site. A stairway extends from the parking area down the steep slope to the residence.

Native vegetation on the property is generally restricted to scattered trees along the perimeter of the site (see tree survey) and on the steep slope between the residence and the garage. Vegetation on the steep slope included western red cedar (*Thuja plicata*), Douglas fir (*Pseudotsuga menziesii*), salal (*Gaultheria shallon*), hazelnut (*Corylus cornuta*), tall Oregongrape (*Mahonia aquifolium*), sword fern (*Polystichum munitum*), and bracken fern (*Pteridium aquilinum*), with patches of invasive Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera helix*), and holly (*Ilex* sp.) also observed.

The entire property is maintained and no habitat features such as snags or downed logs were observed.

2.0 CRITICAL AREA IMPACTS

2.1 Shoreline and Buffer

The only work that would occur within the required 25-foot shoreline buffer would be:

1) the removal of the existing covered pavilion and 2) the removal of three 2.5' by 8' existing aggregate slabs.

2.2 Shoreline Structure Setback

The proposed new residence would be constructed in the same general location as the existing residence and will not encroach into the shoreline structure setback.

2.3 Steep Slope and Steep Slope Buffer

The existing residence is located at the toe of the steep slope on the site. Because of topographic and shoreline buffer constraints, expansion of the residence is not possible without encroaching into this steep slope and its buffer. The stability of the slope was evaluated by Geotech Consultants, Inc.

As part of the proposed project, expansion of the existing residence would encroach into 415 s.f. of steep slope and 1,151 s.f. of steep slope buffer. In addition, construction of a metal grated access bridge would shade 402 s.f. of steep slope. The overall slope area that would be impacted includes some native and ornamental trees as well as invasives including English ivy and Himalayan blackberry.

Development within a critical area steep slope and its buffer are subject to the applicable performance standards outlined in BMC 20.25H.125 (see geotech report for performance standards related to slope stability). As part of these performance standards, all areas of disturbance within the critical area and its buffer must be mitigated per an approved mitigation/restoration plan.

Performance Standard: Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation.

The new residence will be constructed in the same general location as the existing residence and has been designed to avoid encroaching into the critical shoreline buffer or shoreline structure setback areas. Vegetation to be removed on the slope has been minimized to the extent feasible but does include the required removal of several trees along the site perimeter. Understory vegetation within the impacted slope buffer and setback areas is sparse and degraded and does not provide any significant habitat.

Mitigation for the unavoidable tree loss will occur through the implementation of a mitigation planting plan that will restore and enhance all of the remaining vegetated portions of the slope and buffer. Mitigation for the slope impacts and tree removal will also occur through significant restoration and enhancement of the shoreline environment.

Shoreline enhancement includes the removal of the existing pavilion and other impervious surfaces as well as much of the existing lawn. The shoreline buffer and structure setback would then be planted with a variety of native species to significantly increase the habitat value of the shoreline environment and provide a connected corridor between the shoreline and slope enhancement areas. The enhanced shoreline environment would also provide additional soil stability during high winter lake elevations and add natural detritus into the lake.

Performance Standard: Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer.

The proposed project has been designed to minimize impervious surfaces and wherever possible areas such as the driveway will be replaced with pervious surfaces. Based on the current site plan there will be an overall decrease of 1,695 s.f. of impervious surface over existing conditions.

2.4 FEMA Floodplain

The eastern portion of the site adjacent Lake Sammamish is located within the FEMA 100-year floodplain. Since: 1) no work would occur below the ordinary high water of the lake and 2) no significant native vegetation will be removed within the floodplain, the project will have **No Effect (NE)** on any Endangered Species Act (ESA) listed species and a detailed Floodplain Habitat Assessment and Mitigation Plan should not be required.

3.0 CRITICAL AREA MITIGATION

3.1 Shoreline and Buffer

Mitigation within the shoreline includes the removal of the existing pavilion and other impervious surfaces and enhancing the area with a wide variety of native plantings. In addition, much of the existing lawn area would also be restored with native plantings. Planting the area with native species would increase the plant species and structural diversity over existing conditions and will increase food chain support by increasing the biological production of both vegetation and insects. This in turn should provide food and cover for a variety of song birds and other wildlife and increase the habitat and stability functions of the shoreline.

3.2 Steep Slope and Buffer

As part of the proposed project, all of the vegetated steep slope and buffer areas would be restored and enhanced by: 1) removing English ivy and other invasive species, and 2) planting with a variety of native species to increase the plant species and structural diversity of the slope. This planting should increase the overall habitat value of the slope and provide a connection between the slope and shoreline.

3.3 Goal, Objectives, and Performance Standards for Mitigation AreasThe primary goal of the mitigation plan is to increase the habitat functions of the shoreline buffer and slope areas. To meet this goal, the following objectives and performance standards have been incorporated into the design of the plan:

Objective A: Increase the structural and plant species diversity within the mitigation area.

<u>Performance Standard:</u> There will be 100% survival of all woody planted species throughout the mitigation area at the end of the first year of planting. For Years 2-5, success will be based on an 85% survival rate or similar number of recolonized native woody plants. Areal coverage of plantings or native re-colonized species will be at least 15% at Year 1, 20% at Year 2, 25% at Year 3, and 40% at Year 5.

Objective B: Limit the amount of invasive and exotic species within the mitigation area.

<u>Performance Standard:</u> After construction and following every monitoring event for a period of five years, exotic and invasive plant species will be maintained at levels below 10% total cover in the designated mitigation areas. Invasive species include, but are not limited to, Himalayan and evergreen blackberry, Japanese knotweed, and English ivy.

3.4 Construction Management

Prior to commencement of any work in the mitigation areas, the clearing limits will be staked and any existing vegetation to be saved will be clearly marked. A preconstruction meeting will be held at the site to review and discuss all aspects of the project with the landscape contractor and the owner.

A consultant will supervise plan implementation during construction to ensure that objectives and specifications of the mitigation plan are met. Any necessary significant modifications to the design that occur as a result of unforeseen site conditions will be jointly approved by the City of Bellevue and the consultant prior to their implementation.

3.5 Monitoring Methodology

The monitoring program will be conducted for a period of five years, with annual reports submitted to the City. Vegetation monitoring will include general appearance, health, mortality, colonization rates, percent cover, percent survival, volunteer plant species, and invasive weeds.

Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the mitigation area. Review of the photos over time will provide a visual representation of success of the mitigation plan.

3.6 Maintenance Plan

Maintenance will be conducted on a routine, year-round basis. Additional maintenance needs will be identified and addressed following periodic maintenance reviews. Contingency measures and remedial action on the site shall be implemented on an as-needed basis at the direction of the consultant or the owner.

3.7 Weed Control

Routine removal and control of non-native and other invasive plants within the designated mitigation areas shall be performed by manual means. Undesirable and weedy exotic plant species shall be maintained at levels below 10% total cover within all mitigation areas during the monitoring period.

3.8 General Maintenance Items

Routine maintenance of planted trees and shrubs shall be performed. Measures include resetting plants to proper grades and upright positions. Tall grasses and other competitive weeds shall be weeded at the base of plants to prevent engulfment. Weed control should be performed by hand removal.

3.9 Contingency Plan

All dead plants will be replaced with the same species or an approved substitute species that meets the goal of the mitigation plan. Plant material shall meet the same specifications as originally-installed material. Replanting will not occur until after reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.). Replanting shall be completed under the direction of the consultant, City of Bellevue, or the owner.

3.10 As-Built Plan

Following completion of construction activities, an as-built plan for the mitigation area will be provided to the City of Bellevue. The plan will identify and describe any changes in relation to the original approved plan.

4.0 FUNCTIONAL ASSESSMENT TOOL

The project site was evaluated using the City of Bellevue's *Draft Functional Assessment Tool for Upland Habitat* (Attachment A). Based on this assessment the project site received a score of 36. In general, sites with scores between 26 and 40 "provide both actual habitat and likely the opportunity for wildlife to use the habitat on the site."

The project site received relatively high scores for its proximity to Lake Sammamish and a biodiversity corridor located to the west of West Lake Sammamish Parkway. The property was also awarded habitat points by the presence of large coniferous trees.

Limiting factors on the site included the lack of habitat features and a relatively low vegetative vertical structural diversity. In addition, although located close to the biodiversity corridor on the west side of West Lake Sammamish Parkway, the site is entirely surrounded by development and effectively disconnected from the corridor. Furthermore, the existing shoreline of Lake Sammamish is developed and does not provide a significant habitat area.

If you have any questions regarding the critical areas study, please give me a call.

Sincerely,

ALTMANN OLIVER ASSOCIATES, LLC

John Altmann Ecologist

ATTACHMENT A DRAFT FUNCTIONAL ASSESSMENT TOOL FOR UPLAND HABITAT

DRAFT FUNCTIONAL ASSESSMENT TOOL for Upland Habitat City of Bellevue

Property address 1258 WESTLAME SAMM. PRUT	WESTLAKE SAMM PKWYSE Project name IN EOWNA POINT
Location Range 5 & Township 2 th Section 1	Project contact Judy Actalan
Parcel number 925 390 - 0150	Telephone number (423) - 333 - 4535
Property owner	Address P& BOX 518 CARNATION WA 9801
Telephone number () -	

Date(s) of site visit(s) OCT 3, 2016 Washington Department of Fish and Wildlife Priority Habitat and Species (PHS) data obtained? Y/N_

JOHN ALTMANN

Staff

1.0	PROPERTY DESIGNATION	Zone A	Zone B	Zone C	Zone D		Zone
1.1	Existing impervious surface	%06<	20-90%	20-50%	0-20%	442%	ل
2.0	LANDSCAPE PARAMETERS	No points	1 point	2 points	3 points	Additional points	Total
2.1	Land use/development density	Zone A	Zone B	Zone C	Zone D		1
2.2	*Occurrence (number) of habitat types	0	-	2	÷.		m
2.3	**Proximity of known critical areas (distance to edge)	>2,500 ft	<2,500 ft	<1,200 ft	<100 ft	+1 point if contiguous with critical area	1
2.4	Habitat connectivity and corridors	No connection to other habitat areas	≥50-foot-wide connection to vegetated areas of at least 1 acre	>50-foot-wide connection to vegetated areas of at least 50 acres but not listed parks****	≥50-foot-wide connection King County wildlife network or listed parks***	+1 point for ≥150- foot-wide connection King County wildlife network or listed parks***	0
2.5	Patch size	<01.0 ac	1.0-5.0 ac	>5-10 ac	10-42 acres	>42 acres = 4 points	M

City of Bellevue DRAFT FUNCTIONAL ASSESSMENT TOOL for upland habitat

2.0	LANDSCAPE PARAMETERS	No points	1 point	2 points	3 points	Additional points	Total
2.6	*Interspersion of habitat patches (excluding patches <1 ac in area)	No or isolated patch (no others within 0.5-ac circle)	Low	Moderate	High	+1 point if wildlife network or listed park is included	12
3.0	LOCAL PARAMETERS	No points	1 point	2 points	3 points	Additional points	Total
3.1	Size of native trees on site	No significant trees on site	6-12" dbh tree(s) present	12-20" dbh tree(s) present	>20" dbh tree(s) present	+1 point if tree(s) >30" dbh are present	t
3.2	Coniferous component	No conifers on site	Conifers very sparse or present in understory only	Conifers co- or sub-dominant in overstory	Conifers dominant	+1 point if conifers >30" dbh are present	W
3.3	Percent cover (sample vegetated areas only)						
	Ground layer (0-2,3 ft) (5-ft radius)	%0	0-25%	25-50%	50%+	+1 point for cover >75%; -1 point if mowed grass is >50%	ω
	Shrub layer (2.3-25 ft) (10-ft radius)	%0	0-25%	25-50%	50%+	+1 point for cover >75%	4
	Canopy (>25 ft) (30-ft radius)	%0	0-25%	25-50%	50%+	+1 point for cover >75%	4
3.4	Vegetative vertical structural diversity (foliage height diversity)	FHD = 0	FHD < 0.70	FHD = 0.70- 0.90	FHD→ 0.90		
3.5	Vegetative species richness	0-1 species	2-5 species	6-19 species	20+ species		را
3.6	Invasive species component	>75% cover	25-75% cover	10-25%cover	<10% cover	(å	6

City of Bellevue

DRAFT FUNCTIONAL ASSESSMENT TOOL
for Upland Habitat

3.0	LOCAL PARAMETERS	No points	1 point	2 points	3 points	Additional points	Total
3.7	Proximity to year-round water	>1.0 mi or artificial feature with maintained /invasive buffer present within 0.3-1 mi	0.3-1.0 mi or artificial feature with maintained/ invasive buffer present within <0.3 mi	<0.3 mi or artificial feature with maintained/invasive buffer present within patch	Natural water feature present within patch with native buffer	150	9
3.8	Snags (≥4 in dbh)	No snags on site	1/ac or fewer	2-6/ac	>7/ac	Add 0.5 point for each >20 in dbh and 1 point for each >30 in dbh	0
3.9	Other habitat features	None	Stump 1	2-4	5 or more		-
Lanc	andscape parameters points						2
Loca	Local parameters points						22
TOT	TOTAL POINTS						36

^{*}Use circle of the appropriate size for the property's zone:

Zone A – 0.5 ac Zone B – 5.0 ac

Zone C-100 ac

Zone D - 250 ac

** PHS data required for sites in Zone D

***Parks: Mercer Slough, Phantom Lake wetland complex, Larson Lake wetland complex, Cougar Mountain Regional Wildland Park, Weowna Park; King County wildlife network